AMENDMENTS TO THE DRAWING

Please replace drawing sheet 1/1 with the attached Replacement Sheet. The attached Replacement Sheet for Figure 1 is provided to correct an element number. In particular, element number c22d is removed and replaced with c22a.

REMARKS

Reconsideration and Allowance are respectfully requested in view of the foregoing amendments and the following remarks.

Claims 1 through 5, and 11 through 16 are pending in this application.

Claims 1 through 4 have been amended.

Claims 6 through 10 have been cancelled.

Claims 11 through 16 have been newly added.

Regarding the Objection to the Specification

The Abstract of the disclosure was objected to because it exceeded 150 words in length. Applicant has deleted the Abstract in its entirety and replaced it with a shorter Abstract that is proper under MPEP § 608.01(b). Applicant respectfully requests that the objection to the Abstract be withdrawn.

The specification was objected to because various corrections, indicated by the Examiner, were required. Applicant has amended the specification to correct the "[" and "]" issues pointed out by the Examiner. Furthermore, with respect to the arrangement of the specification, Applicant has inserted necessary section headings that provide the proper indication of the arrangement of the specification.

Applicant respectfully submits that no new matter has been added.

Regarding the Drawing Rejections

Applicant has amended Figure 1 such that the element c22d is changed to "c22a" which is supported in the originally filed specification. No new matter has been added.

Regarding the Claim Objections

Claims 1, 4, 6, and 8 were objected to because they included symbols "[" and "]" in them. Claims 1 and 4 have been amended. Claims 6 and 8 have been cancelled without prejudice.

Claim 7 was objected to because of an informality. Applicant has cancelled Claim 7 rendering this objection moot.

Claims 5 and 10 were objected to because of an informality. Applicant has cancelled Claim 10 thereby eliminating the objection that Claims 5 and 10 appear to claim similar limitations while both being dependent upon Claim 1.

Regarding the § 101 Rejection

Claims 6 through 9 were rejected under 35 U.S.C. § 101. Applicant has cancelled Claims 6 through 9 rendering this rejection moot.

Regarding to § 102 Rejection

Claims 1 through 6 and 10 were rejected under 35 U.S.C. § 102(b) for being anticipated by *Kocher et al.* (U.S. Patent No. 6,289,455). Applicant would agree that *Kocher* discloses a circuit arrangement for electronic data processing having at least one non-volatile memory, but Applicant respectfully points out that the codes or keys are not stored in the *Kocher* memories 245, 250 or 255. Instead, the codes or keys in *Kocher* are stored in the protected memory 265. As such, Applicant respectfully submits that *Kocher* is somewhat the opposite of embodiments of the invention disclosed in the present application.

Referring to Claim 1, as amended, Claim 1 recites "a circuit arrangement for electronic data processing comprising:" a "non-volatile memory module for storing encrypted data to be protected against unauthorized access . . . At least one code ROM memory for storing and/or

supplying at least one ROM code; and at least one code ROM module interface logic circuit in electronic communication with the code ROM module . . . The at least one ROM code stored in the code ROM module is used to generate at least one key code for encrypting or decrypting data being written to the memory module or data being read from the memory module, said at least one ROM code further being used for decrypting an address of said memory module." Applicant respectfully submits that the present inventor's code ROM module, which stores the ROM codes, is not specifically the protected memory. Indeed, the non-volatile memory module, which stores encrypted data is the protected memory in embodiments of the present invention. The code ROM module provides the keys for encrypting and decrypting data that is written to or read from the NV memory module. Furthermore, the ROM code from the code ROM module is "used for decrypting an address of said memory module." Applicant respectfully submits that *Kocher* does not teach or anticipate the encryption or decryption of the addresses for a non-volatile memory module based on key codes provided by a code ROM module. As such, Applicant respectfully requests that the § 102 rejection be withdrawn and submits that Claim 1 is ready for allowance.

Claims 2, 3, 4 and 5 are each either directly or indirectly dependent upon Claim 1 and are therefore not anticipated for at least the same reasons as discussed above with respect to Claim 1. Applicant respectfully requests that the § 102 rejection be withdrawn.

Claim 1 was rejected under 35 U.S.C. § 102(e) for being anticipated by *Tomlinson* (U.S. 2003/0044018).

Referring to Figure 3 and paragraph 41 of *Tomlinson*, *Tomlinson* teaches a read only memory 36 that contains executable code that causes the microprocessor 34 to perform encryption and decryption operations. The non-volatile memory 38 contains the decryption keys that are used by the microprocessor along with the executionable code from the ROM 36 to

perform the encryption or decryption operations. *Tomlinson* does not teach or anticipate using a key code from the read only memory 36 that could be used by the microprocessor and other executable code for encrypting or decryption data being written to or retrieved from the NV memory 38 for use by the microprocessor. As such, Applicant respectfully points out that *Tomlinson* does not teach or anticipate a circuit arrangement for electronic data processing wherein a ROM code that is "stored in the ROM code module is used to generate at least one key code for encrypting or decrypting data being written to the memory module or data being read from the memory module, said at least one ROM code further being used for decrypting an address of said memory module." As such, Applicant respectfully requests that the § 102 rejection be withdrawn and submits that Claim 1 is ready for allowance.

Regarding the New Claims

Claims 11 through 16 are new claims that have been added in this amendment. Applicant respectfully submits that these claims recite methods and an apparatus that are not anticipated or rendered obvious by the cited art. In particular, Claim 11 recites, among other things, a method of retrieving encrypted data from a non-volatile memory, the retrieved encrypted data is for use by a processor. The claimed method comprises, among other things, using the address that is received from a CPU to read a key code for code ROM. The key code is then used for decrypting an encrypted address from a CPU and using that encrypted address to read encrypted data from a non-volatile memory. The key code is further used for decrypting the encrypted data that was read from the non-volatile memory module. Applicant respectfully submits that the cited art does not teach or render obvious the newly recited Claim 11.

Independent Claim 14 teaches a method for writing encrypted data to an unencrypted address of the non-volatile memory. Applicant submits that the cited art does not teach or anticipate this claim either.

With respect to new Claim 16, this claim recites a microcontroller comprising a security controller circuit that is also not anticipated or rendered obvious by the cited art.

In view of the above amendments, Applicant believes the pending application is in condition for allowance.

Dated: March 14, 2007   Respectfully submitted,

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